

Remarks

Claims 1-38 were originally filed in this application and all of the claims were rejected on various grounds, primarily 35 USC section 103 for obviousness on the basis of combinations of a number of references. Claims 7, 8 and 31 have been amended and remain in the application. The other claims originally filed have been canceled in this amendment.

The examiner has identified certain prior art as containing various elements of the claims, such as odd/even number of gears and gear sets, clutches, pick arms, swing arms, etc.

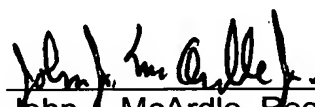
Claim 7 as presently amended incorporates the limitations of claims 1 and 4 as well as the original claim 7. The present claim 7 includes the limitations that the first and second rollers can be in simultaneous contact with the media sheet. This is not identified by the examiner in a particular piece of prior art. Further, the drive for the second roller can be altered with the particular engagement of gears from a swing arm. Finally, a metering nip is included which can drive the media sheet when it is still in contact with the second roller, and the clutch is provided to permit the sheet to move freely through the feed nip associated with the second roller. Thus, a media sheet picked and advanced toward the feed nip, engaged in the feed nip simultaneously with the pick mechanism, set at a different rate of speed through the feed nip by changing the orientation of the swing arm, engaged by the metering nip while still in contact with the feed nip and moved at a higher rate of speed downstream in the media sheet path with the feed nip roller free wheeling due to the clutch associated therewith. Claim 8, now dependent on claim 7, adds the limitation of the second clutch associated with the pick mechanism to allow the media sheet to be driven by feed nip roller without being retarded by the roller in the pick mechanism.

Claim 31 recites a method for moving a media sheet along a media sheet path in which a motor operates in the first direction to drive first and second rollers to move the media sheet in a forward direction along the path. Reversing the direction of the motor results in continued movement of media sheet driven by the second roller in a forward direction with the first roller free wheeling under the influence of a clutch so that the second roller can freely move the media sheet. As stated above,

no particular piece of prior art was cited by the examiner for showing the spacing between the first and second roller that is less than the length of a media sheet, implying simultaneous gripping by multiple rollers. The method of claim 31 permits a media sheet to be contacted by two driven rollers simultaneously, and then permits changing the drive of the second roller to be provided by a different gear which comes into play by simply reversing the drive motor. In a mechanism which feeds a succession of media sheets, in a case where the second drive for the nip feed roller is faster, it would permit the reduction of inter-page gaps between successive sheets. The Kang patent publication cited by the examiner mentions a change in operating mode due to motor reversal, but appears to only show disengagement of drive rather than a change in gear ratio or speed.

Applicants appreciate the thorough examination of the application by the Examiner. An attempt has been made in the present amendment to more clearly focus on specific aspects of the invention. While it is conceded that various aspects of sheet feed mechanisms are available in the prior art in separate applications, the specific apparatus and method now contained in the claims in the application are unique. Consequently, it is believed that the claims remaining in the application, as amended, are allowable over the art of record in the application, and such action by the Examiner is solicited.

Respectfully submitted,
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